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**JOINT APPLIED PROJECT**

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**THE APPLICABILITY OF PERFORMANCE-BASED  
ACQUISITION TECHNIQUES TO LEVEL-OF-  
EFFORT SERVICES CONTRACTS**

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**June 2015**

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**THE APPLICABILITY OF PERFORMANCE-BASED ACQUISITION  
TECHNIQUES TO LEVEL-OF-EFFORT SERVICES CONTRACTS**

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# **THE APPLICABILITY OF PERFORMANCE-BASED ACQUISITION TECHNIQUES TO LEVEL-OF-EFFORT SERVICES CONTRACTS**

## **ABSTRACT**

This research paper explores the use of performance-based acquisition (PBA) techniques when contracting for services on a level-of-effort (LOE) basis. The research explores how often and how effectively these two concepts are used together in the Navy. This project examines the following questions:

1. Can PBA techniques and LOE contract types be used together effectively, or is there a natural conflict between these two approaches?
2. Why does the Navy attempt to use PBA techniques for LOE contracts?
3. What are the consequences of using PBA techniques for LOE contracts?

An analysis of 50 contracts for services revealed that the Navy ineffectively applies PBA techniques to LOE contracts. A review of policy and regulations demonstrated that PBA and LOE are fundamentally incompatible contracting approaches. The study suggests possible explanations for why the Navy attempts to combine PBA and LOE and explores the consequences of doing so. This paper recommends that acquisition policy-makers at all levels make clear that PBA and LOE are dichotomous choices.

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## LIST OF ACRONYMS AND ABBREVIATIONS

A&E	architect-engineer
CPAF	cost-plus-award-fee
CPARS	Contractor Performance Assessment Reporting System
CPFF	cost-plus-fixed-fee
CPIF	cost-plus-incentive-fee
DAR	Defense Acquisition Regulations
DASN(AP)	Deputy Assistant Secretary of the Navy, Acquisition and Procurement
DAU	Defense Acquisition University
DFARS	Defense Federal Acquisition Regulation Supplement
DOD	Department of Defense
DPAP	Defense Procurement and Acquisition Policy
EDA	Electronic Document Access
FAR	Federal Acquisition Regulations
FFP-LOE	firm-fixed-price level-of-effort
FPDS	Federal Procurement Data System
FR	Federal Register
GAO	Government Accountability Office
HCA	Head of the Contracting Activity
LH	labor-hour
LOE	level-of-effort
NCMA	National Contract Management Association
NMCARS	Navy and Marine Corps Acquisition Regulations Supplement
OFPP	Office of Federal Procurement Policy
OMB	Office of Management and Budget
OUSD(AT&L)	Office of the Undersecretary of Defense for Acquisition, Technology, and Logistics
PBA	performance-based acquisition
PBSA	performance-based service acquisition
PWS	performance work statement

QASP	quality assurance surveillance plan
SSC Pacific SOW	Space and Naval Warfare Systems Center Pacific statement of work
T&M	time-and-materials

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## I. INTRODUCTION

Services acquisition continues to be a focus area for Department of Defense (DOD) leadership. Ken Brennan, Deputy Director, Services Acquisition at Defense Procurement and Acquisition Policy (DPAP), recently noted that services account for 55% of DOD's acquisition spending (Brennan, n.d., p. 3).<sup>1</sup> The DOD Guidebook for the Acquisition of Services notes, "For over ten years the DOD has spent more on service requirements than it has on equipment acquisitions" (Department of Defense (DOD), 2012, p. 5). Furthermore, the magnitude of services acquisition has not gone unnoticed by acquisition policy-makers. DOD's Better Buying Power (BBP) Initiatives include "Improve Tradecraft in Acquisition of Services" as one of seven key areas (Undersecretary of Defense, Acquisition, Technology and Logistics (USD(AT&L)), n.d.).

PBA is a key feature of services acquisition policy—it would be difficult to discuss the topic of services acquisition without discussing PBA. Current regulations, policy, and guidance strongly promote the use of PBA techniques for services acquisitions. Services acquisitions that use PBA techniques are called performance-based service acquisitions (PBSA). The underlying rationale of PBA is that the government should not tell contractors *how to perform*, because doing so would stifle industry's creativity. Instead, the government should define its requirements in terms of *what outcomes the contractor needs to accomplish* without specifying the details. Such an approach, its proponents argue, improves competition and empowers private industry to innovate and accomplish desired objectives more efficiently. PBA's rationale is well-established within the federal government and is reflected in current regulations, policy, and guidance. There is a clear preference for using PBA methods for the acquisition of services in Federal Acquisition Regulations (FAR) 37.102(a).

The policy push for PBA has made its way into the Navy acquisition culture. In fact, until 19 March 2015, the Navy required approvals above the contracting officer's level for services acquisitions not classified as PBSA (approval requirements were

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<sup>1</sup> DPAP is an office under the Undersecretary of Defense, Acquisition, Technology, and Logistics (USD(AT&L)).

recently removed per Navy and Marine Corps Acquisition Regulation Supplement (NMCARS) Change 13-05). However, there is a large category of services acquisitions that does not mesh well with PBA's rationale—services acquired on the basis of a level of effort. Generally, services contracts define the contractor's obligation in one of two ways: by describing the required work in terms of the completion of one or more specified tasks ("completion contracts") or by describing the required amount of effort (typically measured in labor hours) that the contractor must expend in performing one or more specified tasks ("level-of-effort (LOE)" contracts) (Cibinic, Nash Jr., & Yukins, 2011, p. 1317). There is a regulatory preference to use the completion type, because it contractually obligates the contractor to produce an end product or result. However, the regulations recognize that not all requirements can state a definite goal or target, or specify an end result. This is why a second type exists, the LOE type. LOE includes time-and-materials (T&M) contracts, labor-hour (LH) contracts, cost-reimbursement term contracts, and firm-fixed-price LOE term contracts (FFP-LOE) (Cibinic, Nash Jr., & Yukins, 2011, p. 1318).

There is an apparent contradiction between PBA and LOE: If one cannot define the work in terms of a definite goal, target, or end product, thus suggesting the use of an LOE contract type, one cannot establish meaningful performance outcomes as required under PBA.

This research paper explores the use of PBA techniques when contracting for services on an LOE basis by examining three central research questions. Because each central research question is complex, Chapter IV of this paper analyzes each by exploring several sub-questions. These sub-questions lend to a more thorough analysis of the PBA-LOE relationship. The central research questions and sub-questions follow:

- Question #1: Can PBA techniques and LOE contract types be used together effectively, or is there a natural conflict between these two approaches?

First, we first need to understand the relationship between PBA and LOE. We need to know how often and how effectively the Navy uses these two approaches together.

Question #1a: Do regulations and policy create a distinct choice between PBA and LOE?

Question #1b: Is the dichotomous relationship between PBA and LOE rational?

Question #1c: Is the dichotomous relationship between PBA and LOE apparent in the data?

- Question #2: Why does the Navy attempt to use PBA techniques for LOE contracts?

After understanding the relationship between PBA and LOE, we can further explore the topic by examining possible motivations for combining the two approaches.

Question #2a: Does the history of PBA policy initiative explain why the Navy combines PBA and LOE?

Question #2b: What incentives does the PBA policy initiative give contracting activities?

Question #2c: Does literature on PBA make clear that it does not apply to LOE?

- Question #3: What are the consequences of using PBA techniques for LOE contracts?

Finally, we need to explore what happens when these two approaches are combined.

Question #3a: What kind of performance incentives are created when PBA is applied to LOE, and what impacts do these incentives have?

Question #3b: What administrative burden is involved with mixing PBA and LOE?

Question #3c: What happens when PBA is not used with LOE?

Exploring these questions required a thorough review of statutes, regulations, policy, guidance, and scholarly articles regarding PBA. Even a quick Internet search reveals that there is rich literature on this topic. Much can be understood about the relationship between PBA and LOE by applying logical argumentation from the premises of policy. However, analyzing policy and literature alone is not sufficient—a more complete understanding of how the Navy combines PBA and LOE may be obtained through an examination of actual contracts for services.

This research examined 50 Navy contracts for services that were identified as PBSA, determined whether these contracts were completion or LOE, then evaluated the LOE contracts more closely to determine whether PBA was properly applied. Furthermore, the researcher noted observations regarding the supposed performance results, acceptable quality levels, and planned methods for evaluating performance.

This paper describes the method for selecting and evaluating the sample, presents the data, then analyzes the three central research questions and their sub-questions within the context of the data, relevant policy and literature, and logical argumentation from the premises of policy. Ultimately, this paper draws several conclusions regarding the relationship between PBA and LOE, including the motivations behind and consequences of combining the two approaches. The study's conclusions inform specific recommendations for improving LOE contracts for services.

This study has four noteworthy limitations. First, only Navy and Marine Corps contracts were included in the sample. This research does not speculate how often other government or DOD agencies combine PBA and LOE. However, the analysis of the natural conflict between PBA and LOE is based primarily on rules and policies that apply to all government agencies; although the study cannot conclude that other agencies combine the concepts, it can conclude that such a combination would be improper. Second, only contracts awarded between 1 March 2014 and 1 March 2015 were included in the sample. This study cannot draw conclusions related to the time period prior to 1 March 2014 *based on the sampled contracts alone*. However, other sources can support inferences and conclusions about the history of combining PBA and LOE. Third, the study is limited to the application of PBA to services acquired on an LOE basis. The study does not make conclusions regarding the effectiveness of PBA in other types of contracts. Finally, when this paper discusses the use of PBA and LOE together, it assumes that both approaches are being applied to the same task. This study does not address (or discount) the approach of using both PBA and LOE in the same contract *yet for different tasks*. In theory, a contract could include several separate tasks, some of which are suitable for the LOE form and others that are suitable for the completion form. These tasks could be separated by contract line items; different contracting approaches

could then be applied to each line item based on suitability. Although the researcher did not observe any such instances in the sample, this approach was not studied directly.

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## **II. METHOD FOR SELECTING AND EVALUATING THE SAMPLE**

### **A. CHAPTER DESCRIPTION**

This chapter describes the method for selecting and evaluating the sample. Because the focus of this research is PBA's applicability to LOE, this research is only concerned with contracts that are identified as both PBSA and LOE. Upon selecting a relevant sample, the study followed a structured process for evaluating each sampled contract. This chapter describes the step-by-step method used to select and evaluate the sample. The results of this evaluation are contained in Chapter III.

### **B. METHOD FOR SELECTING THE SAMPLE**

For the purpose of answering the research questions, a relevant sample for evaluation includes only those contracts that are identified as both PBSA and LOE. Several steps were required to establish a relevant sample for evaluation. First, the researcher obtained a list of all contracts containing the following characteristics from the Federal Procurement Data System (FPDS):

1. Contract or task order (excluding grants, cooperative agreements, or technology agreements);
2. Issued by the Navy or Marine Corps (excluding contracts that the Navy and Marine Corps issued under non-Navy contracts);
3. For services (Product Service Code beginning in alpha character, rather than Federal Supply Code beginning in numeric character);
4. Issued between 1 March 2014 and 1 March 2015; and
5. Indicates "Yes – Service where PBA is used" in the "Performance Based Service Acquisition" field.<sup>2</sup>

Second, the researcher refined the raw data to focus on LOE contracts. This was necessary because, unfortunately, FPDS does not include a separate data field for LOE. For purposes of this study, three contract types are LOE by definition: T&M, LH, and

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<sup>2</sup> This field is manually selected by the contracts specialist in FPDS.

FFP-LOE. Cost-reimbursement contracts *may* be structured as LOE. However, because FPDS does not clearly identify LOE as a separate reporting field, the raw FPDS data does not distinguish between a cost-reimbursement completion type contract and a cost-reimbursement LOE type contract. Therefore, no cost-reimbursement type contracts were excluded from the study *at this phase*. The determination of whether each sampled cost-reimbursement contract was LOE or completion required evaluation of the contract itself. This process will be discussed later in this chapter.

The researcher removed non-LOE contract types from the list of raw data; the data now comprised the entire population of contracts marked as PBSA that could be LOE.

Finally, the researcher chose a sample of 50 contracts from the population of 4,785 contracts. The sample size of 50 was chosen not to establish statistical significance, but rather to sufficiently investigate trends. The sample was chosen randomly using Microsoft Excel. The random sample represents 1.04 percent of the total population of contracts for services issued by the Navy or Marine Corps that are marked as PBSA and *could be* LOE. The list of sampled contracts, entitled “Random Sample,” is included as Appendix A.

### **C. METHOD FOR EVALUATING THE SAMPLE**

The sample was evaluated through an established and objective process. This process is depicted in Figure 1.



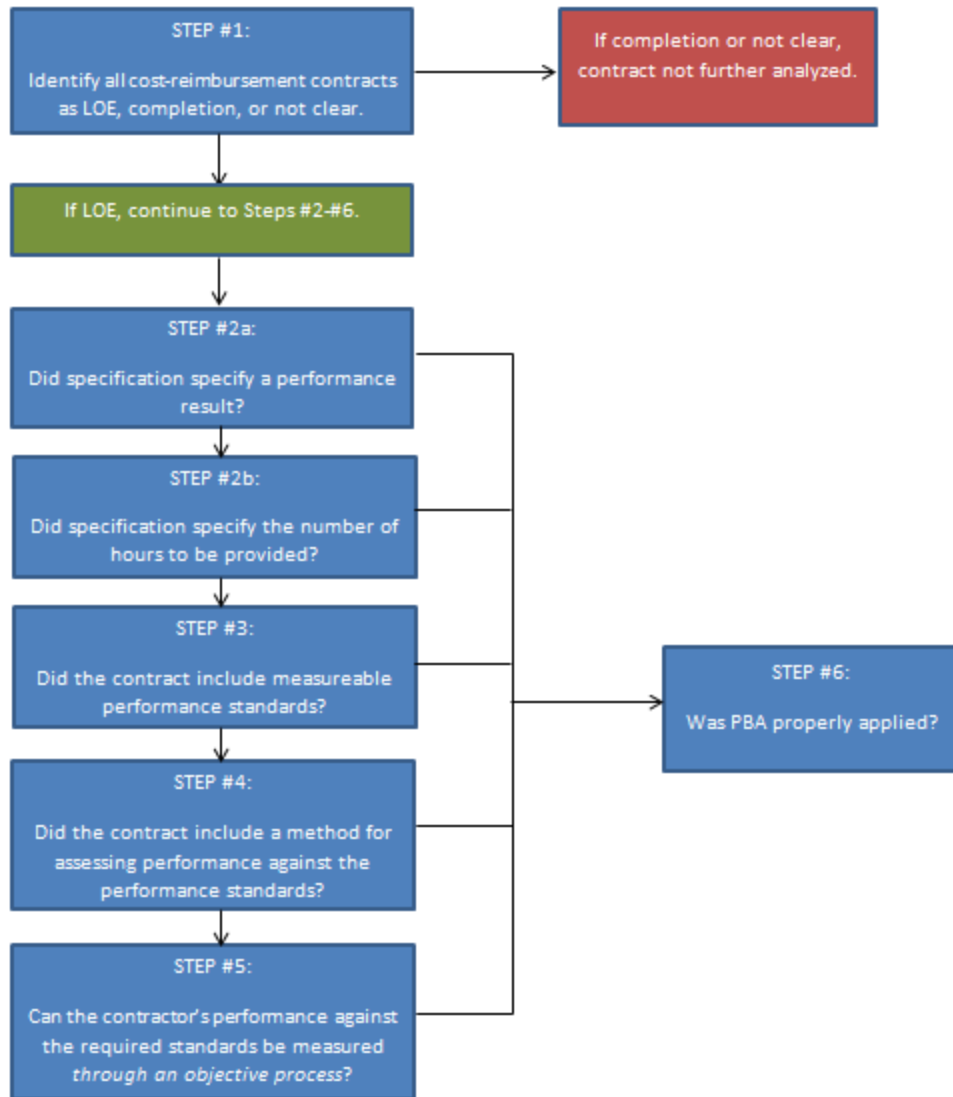


Figure 1. Process for evaluating the sample.

An explanation of the specific steps in Figure 1 follows.

In Step #1, the researcher identified all cost-reimbursement contracts as either LOE or completion. As discussed previously, T&M, LH, and FFP-LOE contract types were considered LOE by definition, but cost-reimbursement contracts may be either completion or LOE. The data fields in FPDS do not distinguish between LOE and completion for cost-reimbursement contracts, so evaluation of the individual contracts was necessary.

The criteria used for identifying a contract as LOE or completion were taken from the FAR's definitions of these types. FAR 16.306(d)(1) states, "a completion form describes the scope of work by stating a definite goal or target and specifying an end product" (Federal Acquisition Regulation [FAR], 2015). Contracts meeting this definition were recorded as completion. FAR 16.306(d)(2) states, "a term form describes the scope of work in general terms and obligates the contractor to devote a specified level of effort for a stated time period" (FAR, 2015). Contracts meeting this definition were classified as LOE.

Some cost-reimbursement contracts analyzed could not be classified as either completion or LOE; these contracts were recorded as "not clear." This was due either to lack of access to the contract specification (e.g., the performance work statement (PWS) or statement of work (SOW)), or an apparent intermingling of the two distinct contract types. Several contracts referenced a specification as a contract attachment, but this attachment was not available in the Electronic Document Access (EDA) system. It is not possible to determine conclusively whether a cost-reimbursement contract is completion or LOE without reviewing the specification, so such contracts were recorded as "not clear." Other contracts intermingled the two distinct forms. Some identified a definite goal or target, but also obligated the contractor to perform a specified level of effort. Other contracts used both "completion" and "LOE" throughout the contract, as if the contract could simultaneously include both forms on a single contract line item. If the contract did not clearly meet the definition of LOE or completion, it was recorded as "not clear."

Because this research focuses on LOE contracts, contracts that were identified as completion or "not clear" were not further analyzed.

The researcher then evaluated four specific criteria to determine whether PBA was applied correctly (Steps #2-#5 in Figure 1). The central question of the research is "Can PBA techniques and LOE contract types be used together effectively, or is there a natural conflict between these two approaches?" To explore this question, the researcher evaluated whether the Navy applied PBA techniques properly to each LOE contract in the sample. If the sample demonstrated that PBA techniques were applied properly to

LOE contracts, this might suggest that PBA techniques are appropriate for LOE services. Conversely, if the sample demonstrated that PBA techniques were not applied properly to LOE contracts, this might suggest that PBA techniques are not appropriate for LOE services.

The researcher recognizes the need to define “proper”—how does one know if PBA techniques were “properly” applied? For the purposes of this research, the researcher assumes that PBA techniques were properly applied if the contract meets the FAR’s definition of PBSA and meets any additional minimum standards imposed by the DOD Guidebook for the Acquisition of Services.

For the purposes of this study, the minimum criteria used to determine if PBA techniques were properly applied are as follows:<sup>3</sup>

1. The PWS describes a required result rather than either “how” the work is to be accomplished or the number of hours to be provided (FAR 37.602(b)(1)). This was evaluated as Step #2 of the process;
2. The contract shall include measureable performance standards (FAR 37.601(b)(2)). This was evaluated as Step #3 of the process;
3. The contract shall include a method for assessing performance against performance standards (FAR 37.601(b)(2)). This was evaluated as Step #4 of the process; and
4. The contractor’s performance against the required standards must be measureable through an objective process (DOD Guidebook for the Acquisition of Services, p. 9).<sup>4</sup> This was evaluated as Step #5 of the process.<sup>5</sup>

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3 Further information regarding how the researcher evaluated each of these standards is included as Appendix B, entitled, “Detailed Evaluation Criteria for Determining Proper Application of PBA.”

4 Although FAR part 37 requires only that the performance standards are measureable, DOD requires that these standards are measureable through an objective process. Furthermore, objectivity is discussed in the definition of a PWS in FAR 2.101.

5 The researcher notes that there is a requirement at FAR 37.601(b)(1) to include a PWS in performance-based contracts. However, there is no requirement to label a PWS as such; therefore, evaluating the title of the specification would be meaningless. A PWS is defined in FAR 2.101 as “a statement of work for performance-based acquisitions that describes the required results in clear, specific and objective terms with measurable outcomes” (FAR, 2015). This definition is covered by the other criteria evaluated in this study, therefore the inclusion of a PWS was not evaluated as a distinct criterion. The researcher also notes that an additional standard exists at FAR 37.601(b), “Performance-based contracts for services shall include –... (3) Performance incentives where appropriate” (FAR, 2015). However, this was not considered in this study, because the appropriateness of incentives is subjective.

In accordance with Steps #2-#5 in Figure 1, each LOE contract in the sample was analyzed to determine whether it satisfied each of these minimum criteria. The criteria evaluated for each sample contract is also represented in Appendix C, entitled “Blank Data Sheet.” The researcher populated this spreadsheet for all contracts sampled, in accordance with Figure 1.

In Step #6 of the evaluation, the researcher determined whether PBA was properly applied. If the contract met all the minimum criteria, it was determined that PBA was properly applied. If the contract did not meet all the minimum criteria, it was determined that PBA was not properly applied. Even if some but not all of the minimum criteria were met, it was still determined that PBA was not properly applied. Based on the standards listed in the FAR and the DOD Guidebook for the Acquisition of Services, all minimum criteria must be met to be defined as PBA.

Throughout the six-step process, the researcher also noted observations regarding the performance results, acceptable quality levels, and planned methods for evaluating performance. Although numerical data can help answer the research questions, observations from the sample are necessary to understand the relationship between PBA and LOE fully. For example, the numerical data may tell us how often the Navy properly applied PBA techniques to LOE services contracts, yet it cannot tell us what a contract looks like when PBA and LOE are combined. The numerical data alone cannot answer *why* the Navy applies PBA to LOE contracts or describe the consequences of doing so. With the research questions in mind, the researcher noted several trends during the evaluation.

In summary, this research examined 50 Navy contracts for services that were identified as PBSA, then objectively evaluated LOE contracts more closely to determine whether PBA was properly applied. Furthermore, the researcher noted observations regarding the performance results, acceptable quality levels, and planned methods for evaluating performance. The numerical data and observations produced by this research process informed the analysis of the research questions.

### III. THE DATA

This chapter presents the numerical data that were obtained using the detailed process described in Chapter II. The data are presented simply as they were observed, without analysis. The relevance of the data to the research questions will be discussed in Chapter IV.

This chapter does not list the researcher's observations regarding performance results, acceptable quality levels, and planned methods for evaluating performance. Individual observations will be introduced as they apply to specific research questions in Chapter IV.

The data spreadsheet was populated then sorted to group LOE contracts. The sorted data spreadsheet is included as Appendix D, entitled, "Completed Data Sheet." Results are presented in the same order as the steps identified in Figure 1.

During Step #1 of the research process, 22 of the 50 contracts sampled were identified as LOE. Nine of 50 contracts were identified as completion. LOE or completion could not be clearly identified in 19 of 50 contracts sampled. This is depicted in Figure 2.



Figure 2. Percentages of LOE, Completion, and Not Clear

In Step #2a of the process, the researcher found that 21 of 22 LOE contracts sampled did not specify a performance result. This is depicted in Figure 3.

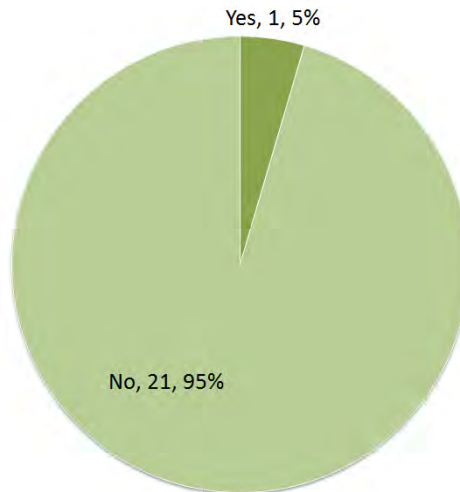


Figure 3. Does the contract specify a performance result?

In Step #2b of the process, the researcher found that 22 of 22 LOE contracts sampled specified a required number of hours to be provided. This is depicted in Figure 4.

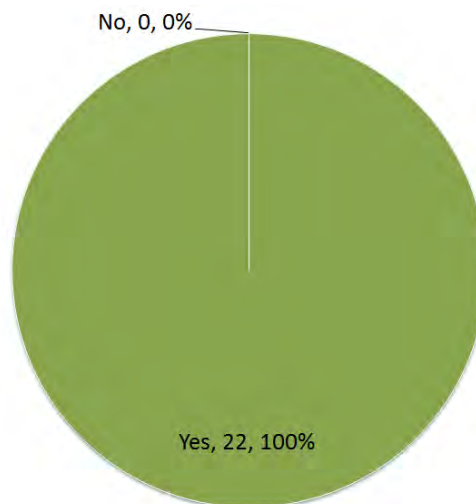


Figure 4. Does the contract specify a number of hours to be provided?

In Step #3 of the process, the researcher found that 15 of 22 LOE contracts sampled did not include measurable performance standards. Additionally, it was not clear whether measurable performance standards existed in 5 of the 22 LOE contracts sampled. This is depicted in Figure 5.

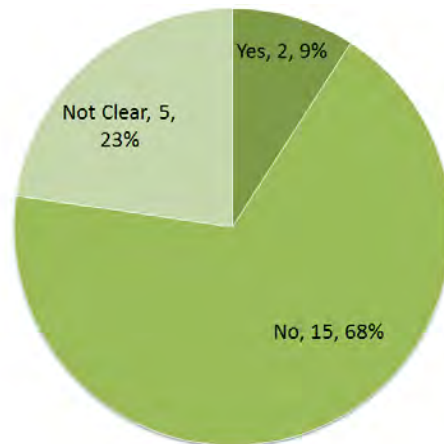


Figure 5. Does the contract include measureable standards?

In Step #4 of the process, 1 of 22 LOE contracts sampled did not include a method by which to measure performance against the standards. Additionally, it was not clear whether this criterion was met for 19 of the 22 LOE contracts sampled. As discussed in Appendix B, this was mainly due to inaccessibility of the Quality Assurance Surveillance Plan (QASP); this does not demonstrate a significant finding. This is depicted in Figure 6.

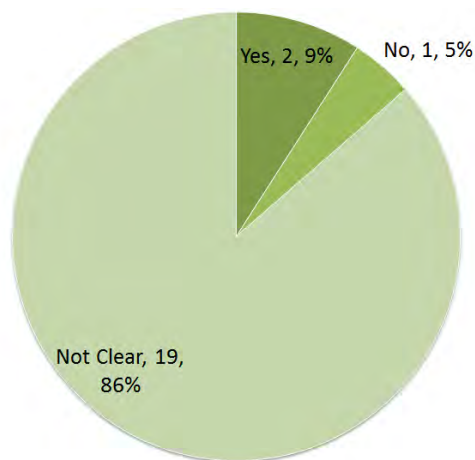


Figure 6. Does the contract include a method of assessing performance?

In Step #5 of the process, 1 of 22 LOE contracts sampled did not provide an objective process by which to measure performance. Additionally, it was not clear whether this criterion was met for 19 of the 22 LOE contract sampled. As discussed in Appendix B, this was mainly due to inaccessibility of the QASP; this does not demonstrate a significant finding. This is depicted in Figure 7.

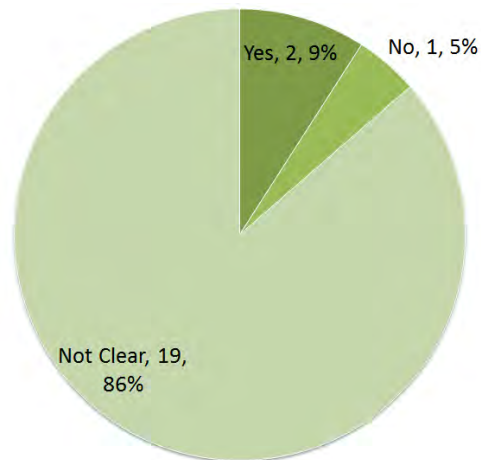


Figure 7. Performance can be measured through an objective process?

In Step #6, the final step of the process, the researcher found that *none* of the LOE contracts sampled properly applied all PBA minimum criteria. This is depicted in Figure 8.

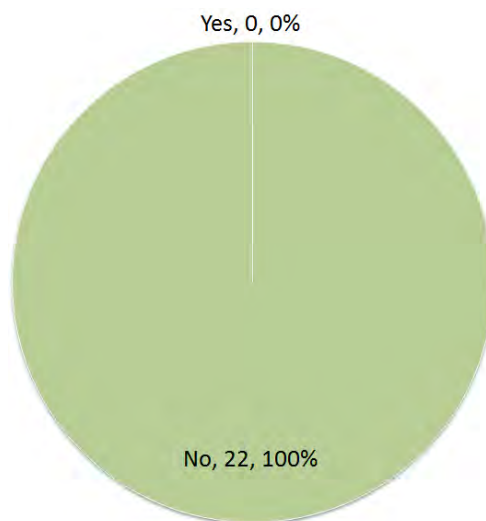


Figure 8. PBA techniques properly applied?



The evaluation of the sampled contracts discovered that not a single LOE contract sampled met all the minimum criteria for the proper use of PBA. Although some contracts included measureable, objective methods of evaluating performance, these methods were not tied to performance results. Notably, not a single LOE contract specified a performance result *rather than* specifying a number of hours to be provided. The data presented in this chapter will inform the analysis of the research questions.

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## **IV. ANALYSIS**

### **A. CHAPTER INTRODUCTION**

The data suggest that the Navy does not properly apply PBA techniques to LOE contracts. Not a single LOE contract sampled met the minimum criteria for the proper use of PBA techniques. If PBA techniques are effectively applied to LOE contracts, one would expect to find at least one such instance in the sample. This leads back to the three central research questions:

- Can PBA techniques and LOE contract types be used together effectively, or is there a natural conflict between these two approaches?
- Why does the Navy attempt to use PBA techniques for LOE contracts?
- What are the consequences of using PBA techniques for LOE contracts?

This chapter analyzes the three central research questions and their sub-questions within the context of the data, relevant policy and literature, and logical argumentation from the premises of policy.

### **B. THE CONFLICT BETWEEN PBA AND LOE**

Question #1 of the research is: Can PBA techniques and LOE contract types be used together effectively, or is there a natural conflict between these two approaches? The analysis of this question is divided into three parts. The relationship between PBA and LOE is examined first in the context of regulations and policy, then from a rational perspective, and finally using the research data. The analysis reveals that PBA and LOE are two naturally conflicting approaches that cannot be used together effectively.

#### **1. Regulations and Policy Create a Distinct Choice**

Question #1a of the research is: Do regulations and policy create a distinct choice between PBA and LOE? The most direct citation illustrating the PBA-LOE conflict is at FAR 37.602(b). This states:

Agencies shall, to the maximum extent practicable – (1) Describe the work in terms of the required results rather than either “how” the work is to be accomplished or the number of hours to be provided. (FAR, 2015)

This creates a distinct choice. Work must be described either a) in terms of the required results, or b) either “how” the work is to be accomplished or the number of hours to be provided. In other words, work cannot be described in both of these ways. Using PBA requires the use of a PWS (FAR 37.601(b)(1)), which by definition describes the work in terms of required results (FAR 2.101). Using an LOE approach, by definition, describes the work in terms of number of hours to be provided (Cibinic, Nash Jr., & Yukins, 2011, p. 1317). Therefore, applying FAR 37.602(b), it logically follows that these two approaches cannot be used simultaneously.

Although FAR 37.602(b)(1) creates this distinct choice, this was apparently not the intent of the policy-makers who created this regulation. In July 2004, a proposed rule regarding PBSA was published in the Federal Register (FR) at 69 FR 43712. This proposed rule included an invitation for public comments; responses to comments were published at 71 FR 211 in January 2006. One of these comments directly addressed the PBA-LOE conflict:

One commenter said the rule should contain a strong statement to emphasize that performance-based contracting requires an end product or service that can be measured and that labor hour instruments are level-of-effort contracts with no definite deliverable. (71 Federal Register (FR) 211)

The Councils addressed this comment with the following:

By definition, all contracts require delivery of supplies or performance of services. The deciding factor for performance-based acquisitions is whether or not the contract has measurable performance standards. The Councils<sup>6</sup> believe that T&M/LH contracts can have measurable performance standards. Therefore, the rule does not preclude the use of T&M/LH contracts for performance-based acquisitions. (71 Federal Register (FR) 211)

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<sup>6</sup> The term “Councils” refers to the Civilian Agency Acquisition Council and the Defense Acquisition Regulations (DAR) Council, the rule-making authorities for federal acquisition regulations.

By stating here that PBA *can apply* to LOE contracts, it appears that the distinct choice created by FAR 37.602(b) was unintentional.

However, the Councils' position is contradictory. Although the Councils stated that the "deciding factor for performance-based acquisitions is whether or not the contract has measurable performance standards," the regulations do not support this position. As discussed in Chapter II, the existence of measurable performance standards is only one of several conditions that must be present to meet the regulatory definition of PBA. The regulations do not allow the use of any single condition as a "deciding factor." Furthermore, although the Councils believed that LOE contracts can have measurable performance standards, they did not support this belief with further explanation or evidence.<sup>7</sup> It seems that the flaws in the Councils' position have since been recognized. Recently, policy-makers at Office of the Undersecretary of Defense, Acquisition, Technology and Logistics (OUSD (AT&L)) have clarified that PBA and LOE are distinct choices. The dichotomous relationship between PBA and LOE is addressed in OUSD(AT&L)'s memorandum entitled "Guidelines for Creating and Maintaining a Competitive Environment for Supplies and Services in the Department of Defense," issued in August 2014. This document states:

Identify the desired output in performance-based terms if possible; if not practical for a particular requirement, then establish level-of-effort terms for that particular requirement solely. (Office of the Undersecretary of Defense, Acquisition, Technology and Logistics (OUSD(AT&L)), 2014, p. 17)

This statement aligns with FAR 37.602(b); contracting officers must choose either PBA or LOE, but not both.

OUSD(AT&L) also discusses this dichotomous relationship in a memorandum entitled, "Appropriate Use of Lowest Price Technically Acceptable Source Selection Process and Associated Contract Type," issued 4 March 2014. The document states:

In some cases, our requirements are firm, easily understood, and tied to clear, measureable outcomes...In other cases, we cannot firmly predict the tasks, efforts, and required outcomes...This situation lends itself to CPFF

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<sup>7</sup> The challenges and effects of combining PBA and LOE are discussed later in this chapter.

LOE...or in some circumstances a T&M contract type.” (OUSD(AT&L), 2014, p. 2)

It is important to note OUSD(AT&L)’s use of the phrase “clear, measureable outcomes.” These are pre-requisites for using PBA. Therefore, the guidance reiterates that if the government cannot tie the requirement to clear, measureable outcomes, then PBA is not suitable for the requirement and an LOE contract type is more appropriate.

Notwithstanding the Councils’ original intent, FAR 37.602(b)(1) still creates a distinct choice between PBA and LOE. Modern policy-makers at OUSD(AT&L) seem to agree that the relationship between PBA and LOE is dichotomous.

## **2. The Dichotomous Relationship is Rational**

Question #1b of the research is: Is the dichotomous relationship between PBA and LOE rational? This question requires setting aside the regulations (only for a moment) and analyzing the relationship between PBA and LOE from a rational perspective. Such an analysis reveals that the two concepts are, based on their underlying rationales, incompatible.

The underlying rationale of PBA is that by describing the work in clear, specific, and objective terms with measureable outcomes, the government can focus the contractor’s attention on desired outcomes rather than “how to” details (which are presumably not important). This approach, its proponents argue, unleashes private industry’s creativity, resulting in both higher quality performance and cost savings. Other supposed benefits include maximizing competition, promoting the use of commercial services, and shifting risk from government to industry (DOD, 2012, p. 8-9). In theory, the government can establish the performance outcomes then step away and let the contractor perform. This rationale relies on the assumption that the requirement can be defined in terms of clear, specific, and objective terms with measureable outcomes. However, if the results are not clear, how does the contractor know what to do? How can the government step away and allow the contractor to innovate? How does the government objectively measure performance against results if the results are not well-

defined to begin with? Without defining clear, specific, and objective terms with measureable outcomes, the theoretical benefits of the PBA approach are lost.

LOE cannot meet these necessary conditions. According to Formation of Government Contracts, the LOE contract type is “used sparingly since it imposes significantly less risk on the contractor than contracts calling for completion of a specified task” (Cibinic, Nash Jr., & Yukins, 2011, p. 1317). The contracting officer cannot use LOE unless specific conditions are met:

- The cost-reimbursement term form can only be used when the requirement cannot be defined well enough to permit the development of estimates within which the contractor can be expected to complete the work (FAR 16.306(d)(2)); or
- The T&M and LH contract types can only be used when it is not possible to estimate accurately the extent or duration of the work or to anticipate costs with any reasonable degree of confidence (FAR 16.601(c)); or
- The FFP-LOE term contract type can only be used when the work required cannot otherwise be clearly defined. (FAR 16.207-3(a))

When a contracting officer has determined that LOE is appropriate, he/she has determined that one of these conditions is present. This raises the question: If a requirement is so unclear that it meets these conditions, how can it be considered to contain “clear, specific and objective terms with measureable outcomes,” as required under PBA? It cannot. Therefore, a requirement that meets the conditions for LOE does not meet the conditions for PBA.

The contrapositive of this statement is also true: A requirement that meets the conditions for PBA does not meet the conditions for LOE. If the desired performance outcomes are known (as they must be under a PBA), the requirement can therefore be clearly defined, and estimates of extent, duration, and costs can logically be developed. Therefore, when PBA is appropriate, the conditions for using LOE are not present.

As demonstrated by the examination of PBA and LOE from a rational perspective, the dichotomous relationship between the two approaches makes sense.

### 3. The Dichotomous Relationship is Apparent in the Data

Question #1c of the research is: Is the dichotomous relationship between PBA and LOE apparent in the data? The dichotomous relationship between PBA and LOE does not exist only in regulations, policy, and theory; it was apparent in the data. If the Councils were correct in the belief that PBA can be applied to LOE, one would expect to find at least one such instance in the sample; yet not a single LOE contract in the sample had properly applied PBA. The contracts most commonly failed by stating a number of hours to be provided rather than specifying a clear performance result (95%). It should be noted that only one LOE contract specified a clear performance result *and also* specified a number of hours.<sup>8</sup> This contract, N00173-14-D-2004/0005, was for research and development and specified the delivery of a prototype as the end result. This contract failed to meet the minimum PBA criteria because it specified both hours *and* a result; as described in FAR 37.602(b), the contract must specify either one or the other, but not both. Therefore, no contract in the sample properly applied PBA because no contract met the single criterion listed at FAR 37.602(b)(1).

Observations from the research illustrate how the sampled LOE contracts failed to meet this criterion. In many cases, the lack of clear performance results appeared to be due to the complexity of the requirements. For example, several contracts focused only on the delivery of technical data such as engineering studies, analyses, investigations, technical reports, test plans, and program management documentation, without tying these to a clear outcome. Additionally, the researcher observed that many contracts required deliverables on an *ad hoc* rather than a finite basis. However, it is important to note that the lack of performance results does not necessarily reflect a failure on behalf of the government. Quite often, the government cannot define clear outcomes or even a finite set of deliverables prior to the award of a contract.

OUSD(AT&L) recognizes this when it states that in some cases, the government “cannot firmly predict the tasks, efforts, and required outcomes” (OUSD(AT&L), 2014,

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<sup>8</sup> The contract apparently ignored the guidance at FAR 35.005(c), which states, “...contracting officers should ensure that language suitable for a level-of-effort approach...is not intermingled with language suitable for a task-completion approach” (FAR, 2015).



p. 2). This is also recognized in an article entitled, “A Proposal for a New Approach to Performance-Based Services Acquisition,” by Vernon J. Edwards and Ralph C. Nash. The authors suggest that for long-term and complex services requirements:

It is unrealistic to ask agencies to specify services at the time of contract award in clear, specific, objective, and measureable terms when future needs are not fully known or understood. (Edwards & Nash, Jr., 2007, p. 355)

Regarding the provision of deliverables on an *ad hoc* basis, Edwards and Nash note that

parties to long-term and complex service contracts...engage in *ad hoc* decision making in response to emerging and changing requirements, shifting priorities, and unexpected circumstances. (Edwards & Nash, Jr., 2007, p. 355)

The complex nature of many sampled contracts helps explain why the LOE contract type was selected, why performance results were not clearly defined, and thus, why effective application of PBA was not possible.

#### **4. Question #1 Conclusion**

The analysis of Question #1 demonstrated that regulations and recent policy establish a dichotomous relationship between PBA and LOE. Contracting officers must choose either one of these approaches or the other, but not both. Furthermore, upon examining the underlying theories of PBA and LOE, it is clear that this dichotomous relationship is rational. The two approaches are fundamentally incompatible. Given that regulations and policy make such a rational distinction, and given the complex nature of the contracts sampled, it is not surprising to discover that the Navy did not appropriately apply PBA techniques to LOE contracts. However, it was surprising to discover how often the Navy attempts to combine these two conflicting approaches. This leads to Question #2.

### **C. POSSIBLE CAUSES FOR COMBINING PBA AND LOE**

Question #2 of the research is: Why does the Navy attempt to use PBA techniques for LOE contracts? Although PBA and LOE are two distinct approaches that should not

be used together, the research shows that the Navy often combines these concepts. Of the 50 contracts sampled, 19 contracts (38%) were not clearly identified as LOE or completion.<sup>9</sup> Excluding the “not clear” category, 22 of the remaining 31 contracts were identified as LOE (71%). This is depicted in Figure 9.

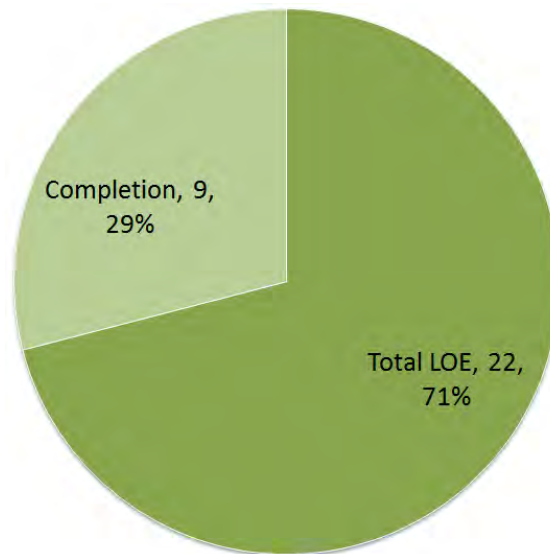


Figure 9. LOE vs. Completion, Excluding “Not Clear”

Excluding those that are not clear, we can reasonably assume that a substantial percentage of the Navy’s T&M, LH, FFP-LOE and cost-reimbursement contracts that are reported as PBA have inappropriately applied PBA.<sup>10</sup> What is motivating the Navy to combine these approaches?

The analysis of this question is divided into three parts. This question requires an examination of the history of the PBA policy initiative, the incentives it creates for contracting activities, and the extent to which services acquisition literature specifically considers the LOE contract type. The analysis reveals that PBA was over-applied.

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<sup>9</sup> This is likely a separate problem in and of itself. Although lack of access to the specification is not necessarily a problem, one could argue that the contract should state the specific contract type (i.e., LOE or completion) clearly, and independent of any contract attachments. The intermingling of contract types is likely more problematic. However, this potential problem is outside of the scope of this study.

<sup>10</sup> Even after applying a large potential margin of error, this magnitude is significant.

## **1. History of the PBA Policy Initiative**

Question #2a of the research is: Does the history of the PBA policy initiative explain why the Navy combines PBA and LOE? A review of the PBA-LOE conflict within its historical context is necessary to explore why the Navy is combining the two approaches. History suggests that the contracting community was pushed to implement a new popular policy, and thus this policy was over-applied.

The history of PBA is well-summarized in a thesis by Christos Avramidis, “An Analysis of Performance-Based Service Acquisition and its Applicability to Hellenic Navy Service Acquisition Activities.” Avramidis’ summary begins in 1980, when the Office of Federal Procurement Policy (OFPP) issued OFPP Pamphlet Number 4, “A Guide for Writing and Administering Performance Statements of Work for Service Contracts” (Avramidis, 2012, p. 7-8).<sup>11</sup> However, as Avramidis’ summary captures, PBA transformed into a movement throughout the 1990s and into the mid-2000s. The PBA concept grew from being a policy preference in 1991 to a statutory preference carrying mandatory reporting requirements and implementation goals. Several agencies created guidebooks on using PBA, including OFPP and DOD. Even an Interagency-Industry Partnership created guidance (Avramidis, 2012, p. 9). A brief review of this history demonstrates that the PBA concept was quite popular among both agency and congressional policy-makers.

The popularity of PBA is best reflected in the growth of DOD’s PBA implementation goals. In 2001, the Office of Management and Budget (OMB) created a goal of using PBA for 20% of total eligible services dollars obligated. OMB raised this goal to 40% in 2004, to 45% in 2006, then ultimately to 50% in 2008 (Avramidis, 2012, p. 59-61).

The PBA policy initiative, including the implementation goals, certainly had an impact. Contracts identified as having used PBA techniques increased substantially from

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<sup>11</sup> In “A Proposal for a New Approach to Performance-Based Services Acquisition,” Edwards and Nash note several attempts to use PBA prior to 1980 (Edwards & Nash, Jr., 2007, p. 354).

fiscal year 2005 to 2014. In 2005, DOD reported using PBA techniques for 29% of total obligations for services; in 2014, this had increased to 57%.<sup>12</sup>

However, as noted in a 2002 Government Accountability Office (GAO) Report entitled, “Guidance Needed for Using Performance-Based Service Contracting,” several agencies that claimed to have applied PBA did not actually do so. Over half of the contracts sampled by GAO (16 of 25) did not actually meet the minimum criteria for PBA (Government Accountability Office [GAO], 2002, p. 2).

The fact that the growth in PBA goals is accompanied with a growth in the percentage of PBA dollars obligated suggests that the PBA push was strong—the acquisition community clearly responded to this pressure. However, the fact that this growth is accompanied with pseudo-PBA contracts, as observed in GAO’s report and in this study, suggests that the acquisition community’s response was not what the policy-makers had in mind. Agencies, including the Navy, seem compelled to identify contracts as PBA whether or not this approach is a proper fit. The negative incentives placed on contracting activities are explored further by the following question.

## **2. Misguided Incentives for Contracting Activities**

Question #2b of the research is: What incentives does the PBA policy initiative give contracting activities? Aside from the preferential treatment given to PBA in the regulations, the PBA policy initiative motivated the contracting community to adopt PBA techniques in two key ways: 1) goals and reporting, and 2) required waivers for non-PBA contracts. Taken together, these strongly incentivize contracting commands to identify contracts as PBA. These incentives are apparently so strong that the motivation to identify a services contract as PBA overrides the motivation to apply PBA techniques only when they are proper.

The effect of goals and reporting on the misapplication of PBA to LOE may be partially explained by how reporting figures are calculated. A memorandum entitled, “Performance-Based Services Acquisition (PBSA),” issued by OUSD(AT&L) on 1

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<sup>12</sup> According to data from FPDS.

February 2006, provides updated exemptions from PBA reporting for certain types of services (OUSD(AT&L), 2006). However, these exemptions have neglected many types of services where PBA is not appropriate.

Edwards and Nash contend that PBA has been over-applied. They argue, quite effectively, that traditional PBA is “not a practical approach to buying long-term and complex services” (Edwards & Nash, Jr., 2007, p. 355). However, the exemptions from PBA reporting do not completely cover long-term and complex services, which may reasonably be appropriate for the LOE approach. Because LOE services contracts are not exempted from PBA reporting, activities may identify LOE contracts as PBA in order to meet PBA goals.

The second motivation, requiring higher level approvals for non-PBA contracts, may have also contributed to the misapplication of PBA. The National Defense Authorization Act for Fiscal Year 2002 required higher level approvals of contracts that were not performance-based. This rule was implemented in DOD as an interim rule in Defense Federal Acquisition Regulation Supplement (DFARS) 237.170-2(a) and DFARS 237.170-3(a) (68 FR 56563). This requirement was later consolidated into DFARS 237.170-2(a) (70 FR 29643). Although Congress later abandoned the higher level approval requirement in favor of more general urgings to use PBA (i.e., “to the maximum extent practicable”) the requirement was never removed from the DFARS (National Defense Authorization Act for Fiscal Year 2006).

DFARS 237.170-2(a) provides flexibility to the agency to determine the specific approving official. Prior to 19 March 2015, the Navy had assigned the Head of the Contracting Agency (HCA) or the Deputy Assistant Secretary of the Navy for Acquisition and Procurement (DASN(AP)) as the approving official, depending on the dollar value of the contract (NMCARS 5237.170-2(a) through Change 13-04).<sup>13</sup> Per NMCARS 5237.170-2(a)(S-90), only architect-engineer (A&E) services and personal medical services were exempt from the approval requirements. Therefore, a Navy

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<sup>13</sup> The Navy recently nullified this approval requirement via NMCARS Change 13-05, by designating the contracting officer as the approval authority. It has yet to be seen what kind of impact this will have on the use of PBA.

contracting officer faced with a complex services requirement would have needed at least the approval of the HCA before awarding a contract that did not use PBA techniques.

The consequences of this higher level approval requirement may have been harmful. In the Navy, the HCA is typically at least two levels higher than the contracting officer in the chain-of-command. Contracting officers who bought complex services, such as those acquired through LOE contracts, were faced with a difficult dilemma—either attempt to mask services requirements as PBA and report them as such, or submit a waiver to the HCA for every complex services contract. In reality, obtaining HCA approval for every contract is not a practical approach. As demonstrated by the data, many contracting officers appear to have chosen to either misapply PBA or misidentify contracts as PBA.

The strong encouragement to use PBA, which included the use of implementation goals, reporting, and higher level approvals, has motivated contracting officers to over-apply PBA techniques. This helps explain why every LOE contract sampled had ineffectively combined the PBA and LOE approaches.

Although incentives have clearly had an impact, this researcher (also a contracting officer) recognizes that some contracting officers may be confused about the relationship between PBA and LOE. In other words, some contracting officers are not consciously choosing either to pursue their HCA's approval or to mask an LOE requirement as PBA; they may never have learned that the two approaches are incompatible. This leads to the next question.

### **3. Gaps in Services Acquisition Literature**

Question #2c of the research is: Does literature on PBA make clear that it does not apply to LOE? Despite the distinction in the FAR, and despite volumes of guidance on how to use PBA, the researcher found a surprising lack of discussion on PBA's application to LOE contracts. This apparent gap in the literature may indicate that contracting officers, or perhaps even some acquisition leaders, are confused about the relationship between PBA and LOE.

The DOD Guidebook for the Acquisition of Services does not specifically address the relationship between PBA and LOE. Although the Guidebook acknowledges that PBA is not appropriate for all requirements, it does not specifically cite services requirements that are fit for the LOE contract type (DOD, 2012, p. 9). Rather, the Guidebook seems to suggest that even complex services requirements can be re-structured to fit the PBA model. For example, the Guidebook advises that

you need to keep the focus on what mission outcomes you are trying to achieve...If you can keep a higher view of what you're asking a contractor to accomplish, you will have far more success in implementing a performance-based approach for your service requirements. (DOD, 2012, p. 10)

The Guidebook identifies basic task statements such as “Conduct a study on...” and “Review and assess...” and suggests that these can be appropriate for PBA (DOD, 2012, p. 26). However, these statements could reasonably indicate a complex services requirement, thus potentially fit for LOE. The Guidebook does not acknowledge that if such services are appropriate for LOE type contracts, PBA should not be used. Therefore, the Guidebook seems to ignore that FAR 37.602(b) and recent policy create a distinct choice between PBA and LOE.

Notably, the Guidebook’s real life examples of how to convert a non-PBA requirement to PBA, specifically the dredging of a river and taxi services, are noncomplex (DOD, 2012, p. 10 and p. 27). The Guidebook does not attempt such a venture for program management support services, likely because the complexity of such a requirement would not lend itself to the PBA approach.

Similar shortcomings are seen in OFPP’s *A Guide to Best Practices for Performance-Based Service Contracting*. In fact, this document fails much more directly in recognizing that PBA and LOE are distinct choices. It states, “when the use of time and material/labor hour contracts is appropriate, agencies should employ PBSC methods to the maximum extent feasible” (Office of Federal Procurement Policy [OFPP], 1998, Chapter 6).<sup>14</sup> Oddly, this guide also recognizes that “application of only selected aspects

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<sup>14</sup> Performance-Based Service Contracts (PBSC) is another name for PBSA.

of the total PBSC methodology is not likely to be successful”; this negates the Guide’s aforementioned suggestion that PBA techniques could be applied on a partial basis (OFPP, 1998, Chapter 2).

Perhaps the most comprehensive instruction on PBA is a course developed by National Contract Management Association (NCMA) entitled “Performance-Based Service Acquisition—Forming Performance-Based Contracts for Acquiring Services.” This 288-page course text also acknowledges that “PBSA is not a ‘one size fits all’ process,” yet it fails to discuss PBA’s applicability to LOE (Corporate Learning Solutions, 2006, p. 2-xiii).

Despite observing a general lack of discussion on the PBA-LOE relationship, the researcher was able to find two sources that addressed the conflict. However, unlike the DOD Guidebook for the Acquisition of Services and OFPP’s “A Guide to Best Practices for Performance-Based Service Contracting,” it is unlikely that these more obscure sources would be accessed by a typical contracting officer in search of guidance. The first source, 71 FR 211, was discussed earlier in this Chapter; this public comment and response from nearly a decade ago is not considered to be reliable guidance for a working-level contracting officer. The second source, an OFPP report from July 2003, “Performance-Based Service Acquisition: Contracting for the Future,” concluded that PBA and LOE naturally conflict. This report recommends, rather than implements, changes to regulations and guidance; it is also not considered to be reliable guidance.

Based on this review, there is an apparent lack of discussion regarding the PBA-LOE relationship in common services acquisition literature. The fact that PBA and LOE are two distinct choices in the regulations is often overlooked. Given that LOE is a valid contract type, including cost-reimbursement term, FFP-LOE, T&M, and LH contracts, this is quite surprising. Even a studious contracting officer, one who reviewed his/her Command’s guidance, DOD’s guidance, OFPP’s guidance, and attended a full-length master’s level course on PBA may not understand that PBA and LOE should not be used together.



#### **4. Question #2 Conclusion**

The analysis of Question #2 demonstrated that PBA was heavily encouraged by DOD acquisition leaders, and this encouragement caused an over-application of PBA to the LOE contract type. The PBA policy initiative included perverse incentives that motivated the Navy to apply PBA techniques to LOE contracts inappropriately. Furthermore, an analysis of the services acquisition literature revealed a surprising lack of discussion on the applicability of PBA to LOE contracts. Some contracting officers may be confused about the PBA-LOE relationship. To such a contracting officer, the combination of PBA and LOE may seem like a correct approach. So why should contracting officers avoid combining these two concepts? This leads to Question #3.

#### **D. CONSEQUENCES OF COMBINING PBA AND LOE**

Question #3 of the research is: What are the consequences of using PBA techniques for LOE contracts? Some may argue that although PBA techniques are not entirely suitable for LOE services, the techniques are useful and should still be applied. Perhaps the process of thinking about performance results, even though they may not be in clear, specific, and objective terms, forces requirements personnel to think about possible outcomes and at least improves the quality of the specification. In other words, a proponent of this argument would suggest that it *cannot hurt* to make requirements personnel specify outcomes. The DOD Acquisition of Services Guidebook, the OFPP Guide, and the NCMA-developed course text suggest that pressing the PBA approach can result in transforming non-PBA requirements to PBA requirements.

However, this argument ignores the negative consequences of using PBA for LOE; these potential negative consequences must be explored and considered. The analysis of this question is divided into three parts. First, the analysis addresses possible performance incentives. Second, the analysis considers possible administrative burden. Finally, the analysis evaluates the notion that applying PBA to LOE is beneficial. The analysis ultimately demonstrates that combining PBA and LOE can result in misguided performance incentives, confusion, and unnecessary administrative burden.

## **1. Useless and Distracting Performance Incentives**

Question #3a of the research is: What kind of performance incentives are created when PBA is applied to LOE, and what impacts do these incentives have? An examination of the sampled contracts revealed that applying PBA to LOE resulted in useless and distracting performance incentives.

The researcher observed several performance incentives that were obvious or redundant. For example, several sampled contracts contained a performance standard similar to the following: “100% of reports are timely, accurate, and complete.” This standard should be obvious to any services contractor; it is hard to imagine a contractor altering its performance based on this information. Furthermore, monitoring performance and providing feedback to the contractor in these areas is redundant for any contract rated in the Contractor Performance Assessment Rating System (CPARS).<sup>15</sup> CPARS rating areas already include Quality of Product or Service, Schedule, and Cost Control (Contractor Performance Assessment Rating System [CPARS], 2014). Therefore, specifying that reports must be timely, accurate, and complete is redundant.<sup>16</sup>

On the other end of the spectrum, many sampled LOE contracts contained standards that created distracting incentives. Some standards focused the contractor’s attention on trivial elements of the overall performance, which may have distracted the contractor’s attention away from important elements. For example, several contracts focused on grammatical correctness of reports. Describing a complex services requirement in terms of the number of grammatical errors ignores the inherent subjectivity in evaluating complex performance outcomes. Therefore, a contractor providing these services may have been incentivized to provide grammatically correct reports (which can be objectively measured), rather than, for example, an innovative solution to a complex engineering problem (which can only be subjectively measured).

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<sup>15</sup> Applicability of CPARS reporting is based on dollar value of the contract and the business sector. Business sectors include Professional/Technical & Management Support Services and Information Technology Services, where services requirements are typically complex in nature and could reasonably fit the LOE contract type (CPARS, July 2014, p. A1-3).

<sup>16</sup> Although CPARS affects only future contracts, it provides incentives for contractors to perform under active contracts.

Drawing attention towards a meaningless objective may distract attention away from a mission-focused objective, thus resulting in harm to the government's mission.

Elliott Branch, DASN(AP), has advised contracting officers to focus on the business deal, specifically what the government is *really* buying and what the government is paying (Burke, 2014). The results of applying PBA to LOE can pollute the contracting officer's understanding of the business deal. Surely, the government is not *really* buying grammatically correct reports. After all, a grammatical report is useless if it adds no value to the agency's mission. Under an LOE contract, the government is *really* buying a service to be performed at a specified level of effort.

As observed in the sampled contracts, when the government cannot define outcomes in clear, specific, and objective terms with measureable outcomes, forced attempts to do so are not effective. This research suggests that attempts to combine PBA and LOE, two naturally incompatible approaches, can result in useless and distracting performance incentives, which may harm the government's true objectives.

## **2. Unnecessary Administrative Burden**

Question #3b of the research is: What administrative burden is involved with mixing PBA and LOE? Forcing the PBA approach on a complex services requirement requires substantial effort during both the procurement and administration phases. This unnecessary administrative burden is another negative effect of combining PBA and LOE.

Prior to issuing the solicitation, the government team must define the requirement. It is both awkward and time-consuming to create a PWS and QASP tied to objectively measurable outcomes for a requirement that cannot be defined in clear, specific, and objective terms with measureable outcomes. The contracting officer, often charged with advocating the PBA approach, may ask requirements personnel difficult questions in hopes of arriving at performance results that can be objectively measured. For example, the DOD Guidebook for the Acquisition of Services encourages the acquisition team to ask "Why?," until some objectively measureable criteria are apparent (DOD, 2012, p. 26). Furthermore, requirements personnel are encouraged to develop a QASP that

defines the required objectives, standards, acceptable quality levels, inspection methods, and incentives (DOD, 2012, p. 34-35).

Because requirements that fit the LOE contract type do not have clear, specific, and objective terms with measureable outcomes, this process has the potential to consume valuable time and create tension between the contracting officer and requirements personnel. The time and effort spent forcing the PBA approach on LOE services prior to contract award represents a cost to the government.

Furthermore, the standards and acceptable quality levels, although meaningless or distracting, must be considered by the contractor in developing the proposal. This time and effort wasted prior to award represents a cost to private industry.

There is additional burden after contract award, during the administration phase. The contractor must perform to the required standards and acceptable quality levels, and the government must monitor this performance in accordance with the QASP. One sampled contract required that technical reports contain grammatical errors in no more than 2% of the lines. The contractor must therefore review every line of these reports prior to submission to ensure that they contain no grammatical errors. Upon receipt of the reports, the government must also review every line, count the grammatical errors, and then record the number of reports meeting this acceptable quality level. It was described earlier that a focus on grammatical correctness is a distraction from the true requirement; it is also a waste of time and effort.

As demonstrated in this analysis, forcing the PBA approach on a complex services requirement has potential to require substantial effort during both the procurement and administration phases. This cost to both the government and industry is another negative consequence of combining PBA and LOE.

### **3. PBA and LOE can be Separated**

Question #3c of the research is: What happens when PBA is not used with LOE? The two previous questions demonstrated that using PBA and LOE together carries negative consequences, in the form of meaningless or distracting incentives and burden

during the procurement and administrative phases. This question analyzes what would happen if, as the regulations direct, the PBA approach was no longer applied to LOE.

Critics of this approach may argue that in the absence of PBA, requirements personnel would not be not challenged to define performance outcomes, and opportunities for proper use of PBA could be missed. Furthermore, critics may argue that without a formal QASP tied to objectively measurable outcomes, government oversight of contractor performance would suffer. These critics may conclude that the over-application of PBA is necessary. This analysis explores this notion and ultimately challenges it.

First, critics of separating PBA and LOE may argue that the PBA ideology challenges requirements personnel to define outcomes, thus identifying opportunities for the proper use of PBA. The identification of such an opportunity is discussed in the DOD Guidebook for the Acquisition of Services: “After some prolonged and heated discussion, they [the Corps of Engineers] determined that...keeping the channel open was their performance objective, not dredging” (DOD, 2012, p. 10).

Surely, some requirements are, by their nature, more appropriate for PBA than LOE. In that sense, some requirements originally described as LOE may be re-structured to be completion, thus allowing the application of PBA techniques.

However, the over-application of PBA to LOE is not a responsible or necessary solution. This approach is not responsible because, as observed in the research data, the Navy has adopted this approach ineffectively; complex services that are truly appropriate for LOE may suffer from the over-application of PBA. Furthermore, this over-application is not necessary. The contracting officer must choose a contract type in accordance with the FAR. FAR Part 16 provides rules for the application of each contract type, and these rules include a preference for the completion type over the LOE type. Therefore, if requirements personnel submit a requirement for a specified number of hours, but it can clearly be converted to a completion type requirement with further definition, the contracting officer must work with requirements personnel to do so. In other words, separating PBA and LOE does not eliminate the contracting officer’s duty to select the

appropriate contract type. If the established rules are followed, and if an LOE contract type is selected, PBA should not be considered—the two are incompatible by definition. The over-application of PBA is not necessary to motivate contracting officers to comply with FAR 37.602(a) or the application and limitation rules of FAR Part 16.

Second, critics of separating PBA and LOE may argue that government oversight of contractor performance would suffer without a formal QASP tied to objectively measurable outcomes. Indeed, the government must have a plan for monitoring contractor performance. However, requiring a formal QASP that is tied to objectively measurable outcomes is clearly not an effective solution for LOE services. As seen in the sampled contracts, QASPs for LOE contracts focused on obvious or distracting outcomes, rendering them ineffective.

The researcher notes that an alternate surveillance plan, one that recognizes the inherent subjectivity of monitoring the performance of complex services, could be developed. Such a surveillance plan could mirror the past performance assessment criteria of CPARS.<sup>17</sup> During CPARS evaluations, contractors can be judged on quality, schedule, and cost control without using a formal QASP tied to objectively measurable outcomes. Such a plan could be standardized, eliminating the administrative burden associated with tailoring a plan to a specific requirement. In fact, the Space and Naval Warfare Systems Center Pacific (SSC Pacific) has adopted such a plan for all non-PBSA contracts. The Non-PBSA Surveillance Plan is attached for reference as Appendix E. The use of a formal QASP tied to objectively measurable outcomes is not necessary to ensure adequate oversight of contractor performance.

While some may argue that the over-application of PBA ultimately results in better requirements definition and government oversight, this argument ignores that such over-application can be harmful and is unnecessary in achieving these desired goals. PBA and LOE can be separated without sacrificing the performance-based preference at FAR 37.602(a) or proper contract oversight.

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<sup>17</sup> CPARS recognizes subjective evaluation of contractor performance with, “Each area assessment must be supported by objective data (or subjective observations)...” (CPARS, July 2014, p. A3-8).

#### **4. Question #3 Conclusion**

The analysis of Question #3 has explored the negative consequences of combining PBA and LOE. Specifically, combining the two approaches can result in meaningless or distracting performance incentives, as well as unnecessary administrative burden. Finally, the analysis challenged the notion that PBA must be over-applied to ensure proper requirements definition and government oversight.

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## **V. CONCLUSION AND RECOMMENDATIONS**

### **A. RESEARCH FINDINGS**

This study has explored the relationship of the PBA contracting approach to LOE services. Through Question #1, it was discovered that PBA techniques cannot be used together effectively, because there is a natural conflict between these two approaches. It was found that regulations and policy create a distinct choice between the two approaches—either PBA or LOE can be used, but not both. By examining the rationales behind these two approaches, it was found that this dichotomous relationship is logical. Despite the dichotomous relationship, a review of 50 services contracts revealed that the Navy often attempts to combine the two approaches. In all 22 LOE contracts sampled, PBA was improperly applied.

Through Question #2, this study suggests that there are three main reasons why the Navy has attempted to combine PBA and LOE. First, the history suggests that amidst a strong push by acquisition leadership to implement PBA, the policy was over-applied to LOE. Second, PBA policy included implementation goals, reporting, and higher level approval requirements that motivated the Navy to apply PBA techniques to LOE contracts inappropriately. Third, this study found that relevant literature does not make the relationship between PBA and LOE clear ; this lack of clarity further contributed to the over-application of PBA techniques to services acquired on an LOE basis.

Through Question #3, this study found that combining PBA and LOE carries negative consequences, including meaningless or distracting incentives and unnecessary administrative burden. These negative consequences represent a cost to both government and industry. Finally, this study challenged the notion that PBA must be over-applied to ensure proper requirements definition and government oversight. The conclusions of this study inform specific recommendations to improve the acquisition of services on an LOE basis.

## **B. RECOMMENDATIONS**

This section offers specific recommendations for improving the acquisition of services on an LOE basis. The recommendations are generally presented in the same order as the analysis. For example, recommendations stemming from the analysis and conclusions from Question #1 will be presented first.

1. Make the dichotomous relationship between PBA and LOE clear in regulations and relevant literature.
- Stress in the FAR that PBA methods are not appropriate for LOE contract types. Add the following exception to FAR 37.102(a)(1):

(v) Services using time-and-materials, labor-hour, cost-reimbursement term form, or firm-fixed-price level-of-effort term contract types.

This was originally recommended in OFPP's, "Performance-Based Service Acquisition: Contracting for the Future," yet it was not adopted by the Councils. Although FAR 37.602(b)(1) creates a distinct choice between PBA and LOE, LOE is not explicitly mentioned. An explicit exception for LOE contracts will inform contracting officers that PBA and LOE cannot be combined.

- Represent the conflict between PBA and LOE in FPDS. Establish a reporting field in FPDS to identify LOE. Automatically populate this field as "Yes" for T&M, LH, or FFP-LOE contract types. For cost-reimbursement types, allow the contracting officer to select either "Yes" or "No." Link this reporting field to the PBSA field. If "Yes – service where PBA is used" is selected, the LOE field must be "No." If the LOE field is "Yes," PBSA must be "No – service where PBA is not used." In the error message, direct the contracts specialist to a reference in the FAR that establishes the dichotomous relationship between PBA and LOE.<sup>18</sup>

Contracts specialists must report every contract in FPDS. Establishing this conflict in FPDS will educate contracting officers that the two types cannot be used together.

- Clarify in the DOD Guidebook for the Acquisition of Services that PBA and LOE are not compatible. The dichotomous relationship of PBA and LOE can be clarified in several sections of this document, including but not limited to: I.5, I.7, 2.8, 4.2, 4.3, 4.5, 4.6, 5.2.1.2, and 6.2.4.

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<sup>18</sup> This reference can be 37.602(b)(1) or a new reference if the aforementioned recommendation is adopted.

This document is intended to be an important resource for the DOD contracting workforce; this is a logical place to stress the incompatibility of PBA and LOE.

- Review policy at all levels to identify additional opportunities to stress the incompatibility of PBA and LOE. There are many policy documents at many different levels that address the use of PBA. As demonstrated in Chapter IV, contracting for services on an LOE basis is often overlooked. DOD can close this gap by reviewing policy and identifying additional opportunities to stress the difference.
  - Review Defense Acquisition University (DAU) and Naval Postgraduate School (NPS) course material for opportunities to stress the PBA-LOE conflict. DOD offers courses on contracting for services through DAU and NPS. The course text for NPS Course MN4311, evaluated as part of this study, did not discuss that PBA and LOE cannot be combined. Similar deficiencies may exist in DAU course material.
  - Issue a policy memorandum to inform the workforce of the dichotomous relationship between PBA and LOE. Although USD(AT&L) has indicated that PBA and LOE are two distinct choices, it has not done so directly in a stand-alone memorandum. This study revealed that the Navy often applies PBA inappropriately to LOE. The Navy, or perhaps USD(AT&L), should issue a stand-alone memorandum to stress that PBA and LOE are two distinct choices.
2. Eliminate perverse incentives to use PBA when it does not apply.
- Add LOE services to the list of services exempt from PBA reporting requirements. Contracting activities should not be motivated to report LOE services contracts as PBA. Establishing the exemption will allow contracting activities to properly separate PBA and LOE without fear of failing to meet PBA implementation goals.
  - Remove DFARS 237.170-2(a), which requires higher level approvals of non-PBSA contracts. This study found that Navy contracting officers were faced with a difficult dilemma—either attempt to mask a services requirement as PBA and report it as such, or submit a waiver to the HCA for every complex services contract. Removing the higher level approval requirement will allow contracting officers to appropriately separate PBA and LOE. The Navy has effectively removed this requirement through NMCARS Change 13-05, but it should be removed for all services.
3. Help ensure proper performance incentives and contract surveillance of LOE contracts.

- Adopt a standard surveillance plan for Non-PBSA contracts. As suggested in Chapter IV, proper performance incentives can exist in LOE contracts without the use of PBA. Through the use of CPARS, performance can be subjectively evaluated and rated. A standard surveillance plan could be created to track directly to the CPARS rating elements. An example of such a plan is included as Appendix E.
- This study also suggests that there is unnecessary administrative burden associated with creating and following a QASP that is tailored to specific performance results when such performance results cannot be identified (as under LOE). By adopting a standard plan for Non-PBSA contracts, this unnecessary administrative burden can be eliminated.

### **C. AREAS FOR FURTHER RESEARCH**

The sampled contracts in this study included only those awarded by the Navy and Marine Corps. Further research could examine how often PBA and LOE are combined in other government agencies; the problem could be pervasive across federal government.

The study found that LOE contracts outweighed completion contracts in the sample (22 to 9). Although the sample was limited to contracts coded in FPDS as PBSA, and although several specifications were not available, the data still suggests that LOE is used quite frequently for the acquisition of services. Further research could identify how often LOE is used as a percentage of all government or DOD contracts.

This study found that in 19 of the 50 contracts sampled, it was not clear whether the contract was completion or LOE. As discussed in Chapter II, this was either due to lack of access to the specification or an apparent intermingling of completion and LOE. These present potential problems. Further research efforts could include gaining access to specifications not available in EDA, then identifying conclusively how often completion and LOE are intermingled. Theoretically, because the two types are fundamentally different in how they obligate the contractor to perform the work, intermingling could make the rights of the parties ambiguous. Further efforts are needed to study this potential issue.

## APPENDIX A. SAMPLED CONTRACTS

Referenced IDV PII	PIID	Date Signed	Type of Contract
N0003314D8005	1033	6/26/2014	COST PLUS FIXED FEE
	N6833515P0019	10/17/2014	COST PLUS FIXED FEE
N0018911DZ041	22	9/25/2014	COST PLUS FIXED FEE
N6893611D0005	8	2/5/2015	COST PLUS FIXED FEE
N0017804D4119	HR07	3/19/2015	COST PLUS FIXED FEE
N6523609D3808	313	8/22/2014	COST PLUS FIXED FEE
	M6785414C0015	5/22/2014	COST PLUS FIXED FEE
N0042114D0073	12	11/4/2014	COST PLUS FIXED FEE
N0018904D0040	8CJT	11/14/2014	COST PLUS FIXED FEE
N6600113D0101	25	3/5/2015	COST PLUS FIXED FEE
N0001911D0002	139	2/11/2015	COST NO FEE
N0042114D0002	55	9/5/2014	COST PLUS FIXED FEE
N0002411D4115	115	9/15/2014	COST PLUS AWARD FEE
N6660410D003A	20	8/26/2014	COST PLUS FIXED FEE
N0001911D0002	137	12/23/2014	LABOR HOURS
N6554013D0006	22	9/25/2014	COST NO FEE
N0002413D6400	379	8/12/2014	COST PLUS FIXED FEE
N0042111D0040	61	7/29/2014	COST PLUS FIXED FEE
N6523609D2700	235	4/15/2014	TIME AND MATERIALS
N6523613D7802	74	5/6/2014	COST PLUS FIXED FEE
N6523609D3808	315	9/8/2014	COST PLUS FIXED FEE
N5005414D1408	24	12/31/2014	COST PLUS FIXED FEE
N6600109D0041	48	6/4/2014	COST PLUS FIXED FEE
N6600113D0106	31	1/15/2015	COST PLUS FIXED FEE
N6893612D0024	EF02	7/31/2014	COST PLUS FIXED FEE
N0042115D0003	1	2/5/2015	COST PLUS FIXED FEE
	N6833514C0196	4/30/2014	COST PLUS FIXED FEE
N6554015D0014	1	4/2/2015	COST PLUS FIXED FEE
N0017314D2004	5	5/1/2014	COST PLUS FIXED FEE
N6523610D2839	779	6/5/2014	COST PLUS FIXED FEE
N0016715D0003	1	2/24/2015	COST PLUS FIXED FEE
	N6600114D0121	5/22/2014	COST PLUS FIXED FEE
N6554010D0012	23	7/14/2014	COST PLUS FIXED FEE
N0018911D0009	81	1/27/2015	COST PLUS FIXED FEE
N6600114D0094	10	2/26/2015	COST PLUS FIXED FEE
N0042113D0002	52	5/13/2014	COST PLUS FIXED FEE
N6247011D8007	8	9/30/2014	COST PLUS FIXED FEE
N0001411D0323	501	9/8/2014	COST PLUS FIXED FEE
N6600114D0032	1	8/12/2014	COST PLUS FIXED FEE
N0003911D0033	100	1/8/2015	COST PLUS INCENTIVE FEE
N6554013D0008	19	7/23/2014	COST PLUS FIXED FEE
N0018911D0009	75	4/25/2014	COST PLUS FIXED FEE
N6274210D1804	22	6/17/2014	COST PLUS AWARD FEE
N6523610D3824	9	3/9/2015	COST PLUS FIXED FEE
N6600109D0014	83	9/30/2014	COST PLUS FIXED FEE
N0042114D0002	46	7/15/2014	COST PLUS FIXED FEE
N6258310D0342	7	7/31/2014	COST PLUS FIXED FEE
N0001411D0323	532	9/23/2014	COST PLUS FIXED FEE
N6523613D2800	87	2/25/2015	COST PLUS FIXED FEE
N0018912DZ010	133	10/27/2014	COST PLUS FIXED FEE

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## **APPENDIX B. DETAILED EVALUATION CRITERIA FOR DETERMINING PROPER APPLICATION OF PBA**

This Appendix contains further information regarding how the researcher evaluated the minimum PBA criteria. This Appendix lists each minimum criterion followed by the method for evaluating the criterion.

### **A. CRITERION #1**

Criterion #1 is: The PWS describes a required result rather than either “how” the work is to be accomplished or the number of hours to be provided (FAR 37.602(b)(1)). This standard was broken into two questions: 1) did the specification (whether or not it was labeled as a PWS) specify a performance result?, and 2) did the specification specify the number of hours to be provided?<sup>19</sup> Based on the FAR’s definition, 1) and only 1) must be “YES” to satisfy this criterion.

#### **1. Did the specification specify a performance result?**

The researcher relied on the following assumptions:

- Reports such as studies, analyses, status reports, document revisions, and plans do not *alone* meet the standard of “performance results.” Although these reports are deliverables, they are typically by-products and are not considered to be the required outcome. The DOD Guidebook for the Acquisition of Services suggests that for PBA, the focus should be on the “mission outcomes you are trying to achieve” (DOD, 2012, p. 10). The Guidebook also suggests asking “WHY is this action needed?” (DOD, 2012, p. 26). The requirement to deliver only reports does not answer the question, “Why?” Therefore, contracts requiring only reports did not meet this standard.

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<sup>19</sup> Note that there is one additional question that could have been asked: Does the specification describe “how” the work is to be accomplished? However, this determination would be subjective so it was therefore not considered. Without greater familiarity with the specific requirement, the researcher was not comfortable determining that a given specification was either too prescriptive or not prescriptive enough to be classified as PBA. As discussed in Chapter IV, the contrast between questions 1) and 2) were sufficient to arrive at the conclusion.

- *Ad hoc* services or deliverables do not constitute performance results. A given requirement *may*, by its nature, lend itself to specifying specific performance results. For example, a requirement for vehicle maintenance could require that “80% of vehicles are operational”—this would be a clear performance result. However, for good or bad reasons, such a requirement may be described only as, “The contractor shall perform maintenance on vehicles.” Without a clear performance result, the specific maintenance activities appear to be *ad hoc*, at the direction of the government. If a requirement did not include clear performance results, this standard was not met.

2. Did the specification specify the number of hours to be provided?

Although this information was not always contained in the same section of the contract, it was fairly easy to identify. Locations included contract line items, special clauses, text in Section B, and the specification.

If 1) and only 1) was “YES,” meaning that the specification describes a required result rather than the number of hours to be provided, the standard was met. If not, the standard was not met.

## **B. CRITERION #2**

Criterion #2 is: The contract shall include measureable performance standards (FAR 37.601(b)(2)). Whether or not the contract specified a performance result, the researcher reviewed the specification to determine if it included measureable performance standards. The researcher reviewed the standards, if they existed, and attempted to determine if these were measureable. The determination of whether something was “measurable” required creative thinking. For example, standards such as, “documents are technically accurate and grammatically correct,” were common. Standards such as this were determined to be measureable, because in theory, one could review and scrutinize each document delivered and measure by counting errors.

The researcher first reviewed the specification for this information. If the information was not contained in the specification, the researcher reviewed the QASP. In the vast majority of cases, the QASP was either not mentioned and not attached, or mentioned but not attached. When the QASP was not mentioned and not attached, the researcher concluded that the contract did not include measureable performance standards. One may contend that, because QASPs are not supposed to be included as part



of the contract (per Section 4.3.3 of the DOD Guidebook for the Acquisition of Services), performance standards may still exist in a QASP that is not mentioned and not attached (DOD, 2012, p. 28). However, this contention would ignore the need to have high level objectives and tasks tied to standards in the resultant contract (DOD, 2012, p. 34). Providing the contractor a non-binding QASP without formally requiring performance objectives, standards, and acceptable quality levels would render the PBA approach meaningless. Therefore, contracts that did not contain measureable standards in the specification, did not mention a QASP, and did not have a QASP attached failed to meet this standard.

However, when the QASP was mentioned but not attached, the researcher could not conclude whether this standard was met; such contracts were recorded as “not clear” in the data sheet. As discussed in the previous paragraph, the QASP *should not* be the only document that contains the measurable standards. However, because the QASP was referenced in the contract, one could argue that such standards are thereby contractually required. The researcher does not agree with this position, because per DOD Guidebook for the Acquisition of Services Section 4.3.3, the QASP should be furnished to the contractor merely as an “informational copy” (DOD, 2012, p. 28). However, the researcher provides the benefit of the doubt to those that would argue for this approach. As discussed in the Chapter IV, closer evaluation of this standard was not necessary to arrive at the overall conclusion.

### **C. CRITERION #3**

Criterion #3 is: The contract shall include a method for assessing performance against performance standards (FAR 37.601(b)(2)). The evaluation of the government’s method for assessing performance required less creativity. Simply put, this standard was met if the government identified *any* method for assessing the performance standards. Note that objectivity was not assessed at this stage; this is discussed in Criteria #4.

The researcher first reviewed the specification. If the information was not contained within the specification, the researcher reviewed the QASP. The DOD Guidebook for the Acquisition of Services Section 4.3.3 does not require the surveillance

method to be stated in the contract, because “this enables the government to make adjustments in the method and frequency of inspections without disturbing the contract” (DOD, 2012, p. 28). Therefore, if the QASP was either not mentioned or not attached, the researcher was unable to determine whether this standard was met. Such contracts were recorded as “not clear.”

#### **D. CRITERION #4**

Criterion #4 is: The contractor’s performance against the required standards must be measureable *through an objective process*. The evaluation of objectivity was based on a review of the stated method of assessing the performance standards. The researcher’s evaluation of this category is best described through two examples. The standard, “100% of documentation inputs are provided by the due dates,” was determined to be objective, because one could count the number of inputs, compare them to the due dates to determine how many were on time, and arrive at a percentage of those that were submitted timely. Such an assessment does not involve subjectivity—an input is clearly either on time or late.

However, assessment methods can be subjective. For example, the following standard cannot be objectively measured: “Review equipment operation procedures to ensure...safety [is] not adversely impacted by emerging technology dictated modifications.” This does not indicate how safety will be objectively measured. Who is to say whether or not safety is adversely impacted? If performance was not measureable through an objective process, this standard was not met.

For the same reasons discussed in the previous standard, if the QASP was either not mentioned or not attached, the researcher was unable to determine whether this standard was met. Such contracts were recorded as “not clear.”

## APPENDIX C. BLANK DATA SHEET

Contract Number	Contract Type	Contract Number	PIID	Contract Type	LOE or Completion?	Specification is identified in the title as a PWS?	Specifies performance result?	Specifies Number of Hours to be provided?	Includes measurable standards?	Method of assessing performance against performance standards?	Performance can be measured through an objective process?	PBSA properly applied?	QASP mentioned but not attached	QASP not mentioned or attached

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## APPENDIX D. COMPLETED DATA SHEET

Contract Number	PIID	Contract Type	LOE or Completion?	Specification is identified in the title as a PWS?	Specifies performance result?	Specifies Number of Hours to be provided?	Includes measurable standards?	Method of assessing performance against performance standards?	Performance can be measured through an objective process?	PBSA properly applied?	QASP mentioned but not attached	QASP not mentioned or attached
N0003314D8005		1033 COST PLUS FIXED FEE	LOE	No	No	Yes	No	?	?	No		x
N0018911D02041		22 COST PLUS FIXED FEE	LOE	Yes	No	Yes	No	?	?	No		x
N0017804D4119	HR07	COST PLUS FIXED FEE	LOE	Yes	No	Yes	Yes	yes	yes	No		
N6523609D3808		313 COST PLUS FIXED FEE	LOE	YES	No	Yes	No	?	?	No		x
N0042114D0073		12 COST PLUS FIXED FEE	LOE	No	No	Yes	No	?	?	No		x
N0042114D0002		55 COST PLUS FIXED FEE	LOE	No	No	Yes	No	?	?	no		x
N0002413D6400		379 COST PLUS FIXED FEE	LOE	No	No	Yes	No	?	?	No		x
N0042111D0040		61 COST PLUS FIXED FEE	LOE	Yes	No	Yes	?	?	?	No	x	
N6523613D7802		74 COST PLUS FIXED FEE	LOE	yes	No	YES	?	?	?	No	x	
N6523609D3808		315 COST PLUS FIXED FEE	LOE	Yes	No	Yes	?	?	?	No	x	
N6893612D0024	EF02	COST PLUS FIXED FEE	LOE	No	No	Yes	No	?	?	No		x
N0042115D0003		1 COST PLUS FIXED FEE	LOE	No	No	Yes	No	No	No	No		
N0017314D2004		5 COST PLUS FIXED FEE	LOE	Yes	Yes	Yes	No	?	?	No		x
N6523610D2839		779 COST PLUS FIXED FEE	LOE	Yes	No	Yes	?	?	?	No	x	
N0016715D0003		1 COST PLUS FIXED FEE	LOE	Yes	No	Yes	No	?	?	No		x
N6600114D0094		10 COST PLUS FIXED FEE	LOE	Yes	No	Yes	yes	Yes	Yes	No		
N0001411D0323		501 COST PLUS FIXED FEE	LOE	No	No	Yes	No	?	?	No		x
N6554013D0008		19 COST PLUS FIXED FEE	LOE	No	No	Yes	No	?	?	No		x
N0042114D0002		46 COST PLUS FIXED FEE	LOE	No	No	Yes	No	?	?	No		x
N0018912D02010		133 COST PLUS FIXED FEE	LOE	yes	No	Yes	No	?	?	No		x
N0001911D0002		137 LABOR HOURS	n/a	No spec	No	Yes	No	?	?	No		x
N6523609D2700		235 TIME AND MATERIALS	n/a	yes	No	Yes	?	?	?	No	x	
N6785414C0015		COST PLUS FIXED FEE	Completion									
N6600113D0101		25 COST PLUS FIXED FEE	Completion									
N6660410D003A		20 COST PLUS FIXED FEE	Completion									
N6600114D0121		COST PLUS FIXED FEE	Completion									
N0018911D0009		81 COST PLUS FIXED FEE	Completion									
N0003911D0033		100 COST PLUS INCENTIVE FEE	Completion									
N0018911D0009		75 COST PLUS FIXED FEE	Completion									
N6523610D3824		9 COST PLUS FIXED FEE	Completion									
N0001411D0323		532 COST PLUS FIXED FEE	Completion									
N6833515P0019		COST PLUS FIXED FEE	Not clear									
N6893611D0005		8 COST PLUS FIXED FEE	Not clear									
N0001911D0002		139 COST NO FEE	Not clear									
N0002411D4115		115 COST PLUS AWARD FEE	Not clear									
N6554013D0006		22 COST NO FEE	Not clear									
N6554015D0014		1 COST PLUS FIXED FEE	not clear									
N6554010D0012		23 COST PLUS FIXED FEE	not clear									
N0042113D0002		52 COST PLUS FIXED FEE	Not clear									
N6247011D8007		8 COST PLUS FIXED FEE	Not clear									
N6274210D1804		22 COST PLUS AWARD FEE	Not clear									
N6258310D0342		7 COST PLUS FIXED FEE	Not clear									
N6523613D2800		87 COST PLUS FIXED FEE	Not clear									
N0018904D0040		COST PLUS FIXED FEE	Not clear									
N5005414D1408	8CJT	24 COST PLUS FIXED FEE	Not clear									
N6833514C0196		COST PLUS FIXED FEE	Not clear									
N6600109D0041		48 COST PLUS FIXED FEE	Not clear									
N6600113D0106		31 COST PLUS FIXED FEE	Not clear									
N6600114D0032		1 COST PLUS FIXED FEE	Not clear									
N6600109D0014		83 COST PLUS FIXED FEE	Not clear									

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## APPENDIX E. SSC PACIFIC NON-PBSA SURVEILLANCE PLAN

### SSC Pacific Non-PBSA Surveillance Plan

#### A. Applicability

The following surveillance plan is applicable to all service contracts and task orders (including Research and Development service contracts and task orders) that are not Performance-Based Service Acquisitions (PBSAs).

#### B. Purpose

The purpose of this surveillance plan is to document the Contracting Officer's Representative's (COR's) approach to monitoring the contract. The surveillance plan is intended to ensure quality, timely delivery, and proper cost control. As stated in the COR Appointment Letter, the COR is responsible for adhering to this plan.

The surveillance plan does not address all of the COR's responsibilities. Additional responsibilities are documented in SSCPACINST 4240.1, the SSC Pacific COR Manual, and the COR Appointment Letter.

#### C. COR Surveillance Responsibilities

The COR shall perform the following:

(a) Review Progress Reports (see Attachment 1, Contractor Report Review)

(b) Review Invoices in Wide Area Workflow (see Attachment 2, Contractor Invoice Review)

(c) Review Deliverables

In addition to reviewing the progress reports discussed above, the COR shall review all other deliverables under the contract including hardware prototypes, software prototypes, test results, final technical reports, etc. The COR shall assess the contractor's conformance to contract requirements, specifications, and standards of good workmanship. The COR shall document the review of contract deliverables in the COR file; the specific format of this documentation is at the COR's discretion.

(d) Participate in Meetings (Formal and Informal)

In addition to the required duties above, the COR is encouraged to meet with the contractor both formally and informally to the maximum extent practicable (e.g. kickoffs, conference calls, demonstrations, and site visits when possible). Such communication promotes accurate progress information, contractor accountability, and proper contract oversight. The COR shall document each meeting in the COR file; the specific format of this documentation is at the COR's discretion.

(e) Review compliance with the SPAWAR Service Contracting Tripwires (only if applicable).

The Tripwires do NOT apply to contracts awarded to Federally Funded Research

and Development Centers (FFRDCs) or RDT& E services with a Product Service Code (PSC) beginning with an "A" and ending with 1, 2, 3, 4, 5, or 7. If the Tripwires do apply, a useful checklist for review is available through the SSC Pacific 2.0 website. See Page 2 of the "Contractor Invoice Review Report" (link below).

[https://contracts.sscpac.nmci.navy.mil/Code20/ResourceLibrary/Cors/cor\\_inst\\_inv\\_review.doc](https://contracts.sscpac.nmci.navy.mil/Code20/ResourceLibrary/Cors/cor_inst_inv_review.doc)



# ATTACHMENT 1 - CONTRACTOR REPORT REVIEW

Subj: CONTRACT NUMBER \_\_\_\_\_  
CONTRACTOR \_\_\_\_\_

Ref: (a) DID # Type \_\_\_\_\_  
of report Period \_\_\_\_\_  
Covered \_\_\_\_\_

1. Reference (a) report was reviewed on \_\_\_\_\_
2. \_\_\_\_\_

Quality of Product or Service	
ELEMENT REVIEWED	COMMENTS/DISCREPANCIES (Required)
Assess the contractor's conformance to contract requirements, specifications and standards of good workmanship.	
List and assess any sub-tasks to indicate different efforts where appropriate. For example: Are reports/data accurate?	
Does the work performed meet the specifications of the contract?	
<input type="checkbox"/> Yes <input type="checkbox"/> No	
Does the contractor's work measure up to commonly accepted technical or professional standards?	
<input type="checkbox"/> Yes <input type="checkbox"/> No	
Assess the degree of government direction required to solve problems that arise during performance.	

Schedule	
<i>ELEMENT REVIEWED</i>	<i>COMMENTS/DISCREPANCIES (Required)</i>
Assess the timeliness of the contractor against the completion of the contract, milestones, delivery schedules, and administrative requirements (e.g., efforts that contribute to or effect the schedule variance). Note: If performance schedule slippage is detected, the COR should determine the factors causing the delay and report them to the Contracting Officer.	

Cost Control	
<i>ELEMENT REVIEWED</i>	<i>COMMENTS/DISCREPANCIES (Required)</i>
Assess the contractor's effectiveness in forecasting, managing, and controlling contract cost. For example, does the contractor keep within the total estimated cost (what is the relationship between the negotiated cost, budgeted cost and actual cost)?	
Did the contractor do anything innovative that resulted in cost savings?	
<input type="checkbox"/> Yes <input type="checkbox"/> No	
Were billings current, accurate and complete?	
<input type="checkbox"/> Yes <input type="checkbox"/> No	
Are the contractor's methods for monitoring the budget adequate?	
<input type="checkbox"/> Yes <input type="checkbox"/> No	

Does the percentage of work performed reasonably correspond to the percentage of funds expended?	
<input type="checkbox"/> Yes <input type="checkbox"/> No	
Is there any evidence of inefficiency or wasteful methods?	
<input type="checkbox"/> Yes <input type="checkbox"/> No	

Any issues identified in the review will be documented in writing, attached to this form and forwarded to the PCO and PM as applicable with a copy in the COR file.

Conclusion (Required - potential performance/cost problems):

Contracting Officer's Representative (Signature) (Date)

## ATTACHMENT 2 - CONTRACTOR INVOICE REVIEW

Date of review: \_\_\_\_\_

Subj: CONTRACT NUMBER \_\_\_\_\_  
 CONTRACTOR \_\_\_\_\_

Ref: (a) Invoice Number \_\_\_\_\_  
 Invoice Date \_\_\_\_\_  
 Period Covered/Billing Cycle \_\_\_\_\_

1. Reference (a) invoice with supporting documentation for work performed under subject contract was reviewed in Wide Area Workflow and verified against the supporting documentation on \_\_\_\_\_

2.

<i>ELEMENT REVIEWED</i>	<i>COMMENTS/DISCREPANCIES (Required)</i>
Work performed meets contract requirements?  <div style="text-align: center;"> <input type="checkbox"/> Yes    <input type="checkbox"/> No         </div>	
Labor Hours/Labor Mix reported are consistent with the work performed?  <div style="text-align: center;"> <input type="checkbox"/> Yes    <input type="checkbox"/> No         </div>	
Direct Material received was validated, considered reasonable, and determined to be necessary?  <div style="text-align: center;"> <input type="checkbox"/> Yes    <input type="checkbox"/> No    <input type="checkbox"/> N/A         </div>	
Travel validated; considered necessary and not in excess of Joint Travel Regulations (JTR) (COR must have a process for reviewing travel sufficient to ensure costs are reasonable and do not exceed JTR)?  <div style="text-align: center;"> <input type="checkbox"/> Yes    <input type="checkbox"/> No    <input type="checkbox"/> N/A         </div>	

Other Direct Cost (ODC) such as incidental material/travel/other non-labor costs (but NOT subcontractor or consultant costs) reviewed and considered reasonable and necessary?			
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	
Contractor Acquired Property validated and determined reasonable and necessary?			
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	
Subcontractor Labor Hours/Labor Mix reported are consistent with the work performed?			
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	

Any issues identified in the invoice review will be documented in writing, attached to this form and forwarded to the PCO and PM as applicable with a copy in the COR file.

Conclusion (Required - potential performance/cost problems):

Contracting Officer's Representative (Signature) (Date)

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